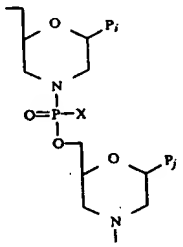
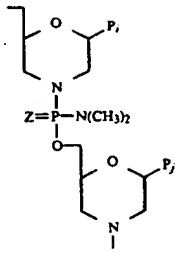
Amendments to the Specification:

Please replace the paragraph at page 8, lines 17-31 of the specification with the following paragraph:

The synthesis, structures, and binding characteristics of morpholino oligomers are detailed in above-cited U.S. Patent Nos. 5,698,685, 5,217,866, 5,142,047, 5,034,506, 5,166,315, 5,521,063, and 5,506,337, all of which are incorporated herein by reference. The antisense oligomers (compounds) of the present invention are composed of morpholino subunits of the form shown in the above cited patents, where (i) the morpholino groups are linked together by uncharged phosphorus-containing linkages, one to three atoms long, joining the morpholino nitrogen of one subunit to the 5' exocyclic carbon of an adjacent subunit, and (ii) the base attached to the morpholino group is a purine or pyrimidine base-pairing moiety effective to bind, by base-specific hydrogen bonding, to a base in a polynucleotide. The purine or pyrimidine base-pairing moiety is typically adenine, cytosine, guanine, uracil or thymine. Preparation of such oligomers is described in detail in U.S. Patent No. 5,185,444 (Summerton and Weller, 1993), which is hereby incorporated by reference in its entirety. As shown in the reference, several types of nonionic linkages may be used to construct a morpholino backbone. One such linkage is of the form:



where Pj is a purine or pyrimidine base-pairing moiety effective to bind by base-specific hydrogen bonding to a base in a polynucleotide; X is F, CH_2R, OCH_2R, SCH_2R, or NR^1R^2; and each of R, R^1 and R^2 is H, CH_3, or other moiety that does not interfere with said base specific hydrogen bonding. A further such linkage is of the form:



where Pj is a purine or pyrimidine base-pairing moiety effective to bind by base-specific hydrogen bonding to a base in a polynucleotide; and Z is O or S.